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medium allow the display of a cyclical time concept which includes nature, creatures, and integration of pictures and comments and is based on a predetermined cycle typically including a sequence of transitions among the four seasons of spring, summer, autumn and winter, or of a day consisting of morning, afternoon, and night, or a cycle can also be a temperature or humidity cycle.--

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IN THE CLAIMS

Please amend claims 1-28 by rewriting same to read as follows:

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--1. (Amended) An information-processing apparatus, comprising:

storage means for storing raw data and time-axis data related to said raw data and stored in said storage means by association with said raw data;

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thumbnail-icon-generating means for generating a thumbnail icon representing said raw data read from said storage means;

spiral-period-setting means for setting a spiral period of a virtual spiral based upon a predetermined unit time;

spiral-axis-setting means for setting a spiral axis of said virtual spiral based upon said predetermined unit time; and

thumbnail-icon-array-displaying means for displaying said thumbnail icon in an array on said virtual spiral based upon

said time-axis data associated with said raw data represented by said thumbnail icon.

--2. (Amended) The information-processing apparatus according to claim 1, said information-processing apparatus further comprising:

representative-thumbnail-selecting means for selecting one of a plurality of thumbnail icons displayed in said array on said virtual spiral as a representative thumbnail icon; and

representative-thumbnail-icon-array-displaying means for displaying said representative thumbnail icon selected by said representative-thumbnail-selecting means in said array on said virtual spiral.

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--3. (Amended) The information-processing apparatus according to claim 1, said information-processing apparatus further comprising:

spiral-layer-synthesizing means for synthesizing a plurality of spiral layers each including said virtual spiral, said spiral axis, and said thumbnail icon; and

synthesized-layer-displaying means for displaying a synthesized layer produced by said spiral-layer-synthesizing means.

--4. (Amended) The information-processing apparatus according to claim 1, further comprising:

thumbnail-icon-extracting means for extracting a specific

thumbnail icon from a plurality of thumbnail icons displayed in said array based on said time-axis data based upon a predetermined cycle; and

data-outputting means for outputting said raw data represented by said specific thumbnail icon extracted by said thumbnail-icon-extracting means.

--5. (Amended) The information-processing apparatus according to claim 1, wherein said unit time corresponding to said spiral period set by said spiral-period-setting means is one of a month unit and a one-year unit including a spring, a summer, an autumn, and a winter.

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--6. (Amended) The information-processing apparatus according to claim 4, wherein said predetermined cycle includes one of: a cycle based on a time axis representing one of hours, days, months, and years; a cycle based on a temperature; and a cycle based on humidity data.

--7. (Amended) The information-processing apparatus according to claim 2, wherein said representative-thumbnail-icon-array-displaying means displays said thumbnail icon as a semitransparent display.

--8. (Amended) The information-processing apparatus according to claim 3, further comprising visual-point-moving means for moving a visual point of said spiral layer

displaying said virtual spiral, said spiral axis, and said thumbnail icon.

--9. (Amended) The information-processing apparatus according to claim 8, wherein said visual-point-moving means automatically moves said visual point of said spiral layer along a time axis.

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--10. (Amended) The information-processing apparatus according to claim 8, wherein said visual-point-moving means one of moves said visual point of said spiral layer by performing visual-point parallel-movement processing and changes a direction of a visual line of said spiral layer by performing visual-line-direction modification processing, said visual-line-direction modification processing performed in accordance with an operation carried out manually on a predetermined operation key for said visual-point parallel-movement processing and said visual-line-direction modification processing.

--11. (Amended) The information-processing apparatus according to claim 8, wherein said visual-point-moving means moves said visual point in said visual-point parallel-movement processing in a direction of one of an X, Y, and Z axis in a displayed virtual space.

--12. (Amended) The information-processing apparatus

according to claim 8, wherein said visual-point-moving means moves said visual point in one of yaw, pitch, and roll directions in a displayed virtual space.

--13. (Amended) The information-processing apparatus according to claim 10, wherein said visual-point-moving means automatically resets said visual point to a predetermined origin position after a lapse of a predetermined time from said manual operation to start one of said visual-point parallel-movement processing and said visual-line-direction modification processing.

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--14. (Amended) The information-processing apparatus according to claim 10, wherein said visual-point-moving means one of automatically moves said visual point and automatically switches a position of said visual point to an other location after a lapse of a predetermined time from said manual operation to start one of said visual-point parallel-movement processing and said visual-line-direction modification processing.

--15. (Amended) A computer-graphic-display program storage method comprising the steps of:

storing raw data and time-axis data related to said raw data in storage means by association with said raw data and reading said raw data;

generating a thumbnail icon representing said raw data

read in said storage step;

setting a spiral period of a virtual spiral based upon a predetermined unit time;

setting a spiral axis of said virtual spiral based upon said predetermined unit time; and

displaying said thumbnail icon in an array on said virtual spiral based upon said time-axis data associated with said raw data represented by said thumbnail icon.

--16. (Amended) The computer-graphic-display program storage method according to claim 15, further comprising the steps of:

selecting a specific thumbnail icon of a plurality of thumbnail icons displayed in said array on said virtual spiral as a representative thumbnail icon; and

displaying said representative thumbnail icon selected in said representative-thumbnail-icon-selecting step in said array on said virtual spiral.

--17. (Amended) The computer-graphic-display program storage method according to claim 15, further comprising the steps of:

synthesizing a plurality of spiral layers each including said virtual spiral, said spiral axis, and said thumbnail icon; and

displaying one of said plurality of synthesized layers produced in said spiral-layer- synthesizing step.

--18. (Amended) The computer-graphic-display program storage method according to claim 15, further comprising the steps of:

extracting a specific thumbnail icon from a plurality of thumbnail icons displayed in said array based on said time-axis data based upon a predetermined cycle; and

outputting said raw data represented by said specific thumbnail icon selected in said thumbnail-icon-extracting step.

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--19. (Amended) The computer-graphic-display program storage method according to claim 15, wherein said unit time corresponding to said spiral period set by said spiral-period-setting step is one of a month unit and a one-year unit including a spring, a summer, an autumn, and a winter.

--20. (Amended) The computer-graphic-display program storage method according to claim 18, wherein said predetermined cycle includes one of: a cycle based on a time axis representing one of hours, days, months, and years; a cycle based on a temperature; and a cycle based on humidity data.

--21. (Amended) The computer-graphic-display program storage method according to claim 16, wherein in said representative-thumbnail-icon-array-displaying step said representative thumbnail icon is displayed as a

semitransparent display.

--22. (Amended) The computer-graphic-display program storage method according to claim 17, further comprising a step of moving a visual point of said spiral layer displaying said virtual spiral, said spiral axis, and said thumbnail icon.

--23. (Amended) The computer-graphic-display program storage method according to claim 22, wherein said visual-point-moving step automatically moves said visual point of said spiral layer along a time axis.

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--24. (Amended) The computer-graphic-display program storage medium according to claim 22, wherein said visual-point-moving step performs one of moving said visual point of said spiral layer by performing visual-point parallel-movement processing and changing a direction of a visual line of said spiral layer by performing visual-line-direction modification processing, said visual-line-direction modification processing performed in accordance with an operation carried out manually on a predetermined operation key for said visual-point parallel-movement processing and said visual-line-direction modification processing.

--25. (Amended) The computer-graphic-display program storage method according to claim 22, wherein said



visual-point-moving step moves said visual point in said visual-point parallel-movement processing in a direction of one of an X, Y, and Z axis in a displayed virtual space.

--26. (Amended) The computer-graphic-display program storage method according to claim 22, wherein said visual-point-moving step moves said visual point in one of yaw, pitch, and roll directions in a displayed virtual space.

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--27. (Amended) The computer-graphic-display program storage medium according to claim 24, wherein said visual-point-moving step automatically resets said visual point to a predetermined origin position after a lapse of a predetermined time from said manual operation to start one of said visual-point parallel- movement processing and said visual-line-direction modification processing.

--28. (Amended) The computer-graphic-display program storage method according to claim 24, wherein said visual-point-moving step automatically performs one of moving said visual point and automatically switching a position of said visual point to an other location after a lapse of a predetermined time from said manual operation to start one of said visual-point parallel-movement processing and said visual-line-direction modification processing.--

REMARKS